

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-017073**Date Inspected:** 28-Sep-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1500**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site**CWI Name:** See below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** SAS OBG**Summary of Items Observed:**

The Quality Assurance (QA) Inspector, Rick Bettencourt was on site at the job site between the times noted above.

The QA Inspector was on site to randomly observe the in process welding and inspection of the weld joints identified and hole restoration, and the following observations were made:

1E-PP-8.5-E3-2

The QA Inspector randomly observed Jin Pei Wang performing grinding tasks of ultrasonic testing rejects in the above identified lifting lug deck hole restoration. The QA Inspector randomly observed the Smith Emery (SE) Quality Control (QC) Inspector Steve McConnell was on site to monitor and record the in process welding parameters. The QA Inspector noted the ABF welder was utilizing the SMAW process with 5/32" E7018 low hydrogen electrodes. The QA Inspector randomly observed the ABF welder was utilizing 188 Amps while performing the SMAW repair. The QA Inspector performed a random visual inspection of the previously excavated area and noted it had been ground and blended to a boat shaped weldable profile. The QA Inspector randomly observed and noted the ABF welder was preheating the material to approximately 150°F prior to making the SMAW repairs. The QA Inspector noted the SMAW repairs appeared to be in general compliance with ABF-WPS-1000 repair. The QA Inspector noted the repair welding was completed on the QA Inspectors shift. After the ABF welder completed the welding, he performed grinding tasks while removing the weld reinforcement flush with the top deck base material.

1E-PP-11-E3-2

The QA Inspector randomly observed Darcel Jackson performing grinding tasks of ultrasonic testing rejects in the above identified lifting lug deck hole restoration. The QA Inspector randomly observed the ABF welder had

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excavated both of the UT rejections located in the above identified hole. The QA Inspector randomly observed the ABF welder had previously completed 1 of the 2 excavations and the other reject was currently in process. The QA Inspector randomly observed the Smith Emery (SE) Quality Control (QC) Inspector Steve McConnell was on site to monitor and record the in process welding parameters. The QA Inspector noted the ABF welder was utilizing the shielded metal arc welding process with 1/8" E7018 low hydrogen electrodes. The QA Inspector randomly observed the ABF welder was utilizing 127 Amps while performing the SMAW repair. The QA Inspector performed a random visual inspection of the previously excavated areas and noted they had been ground and blended to a boat shaped weldable profile. The QA Inspector randomly observed and noted the ABF welder was preheating the material to approximately 150°F prior to making the SMAW repairs. The QA Inspector noted the SMAW repairs appeared to be in general compliance with ABF-WPS-1000 repair. The QA Inspector noted the repair welding was completed on the QA Inspectors shift. After the ABF welder completed the welding, he performed grinding tasks while removing the weld reinforcement flush with the top deck base material.

1E-PP-9.5-E4-1

The QA Inspector randomly observed an ABF helper representative performing grinding tasks ultrasonic testing reject in the above identified lifting lug deck hole restoration. The QA Inspector noted no welding was performed only excavations of previously tested weld. The QA Inspector randomly observed the ABF welder was performing the excavation from the bottom side of the top deck plate or from face B.

7E/8E

The QA Inspector randomly observed the ABF erection personnel begin pushing the orthotropic box girder identified as lift 8E into place. The QA Inspector noted no fitting tasks were performed on the QA Inspectors shift. The ABF Project Engineer John Callaghan informed the QA Inspector tomorrow 9-29-10, ABF will begin fitting the top and bottom plates of the OBG with steel backing bars in preparation of welding.

The QA Inspector performed a job walk of the East and West bound bridge decks and updated the QA NDT and production log book and chart. In addition the QA Inspector updated the QA NDT spreadsheet and production checklist for the in process production welding and repairs of the top deck plate lifting lug hole restoration. The QA Inspector noted only the top deck restoration holes in lift 1E are currently ready and are actively being repaired. No other lift are currently being repaired on this date.



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Summary of Conversations:

noted above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mohammad Fatemi (916)-813-3677, who represents the Office of Structural Materials for your project.

Inspected By:	Bettencourt,Rick
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Quality Assurance Inspector

Reviewed By:	Levell,Bill
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QA Reviewer
